	1	18.2	-		/ .	The state of the s	•			
	فذرا يكافيني				280	TACGAGT"TGA	CATATGGTTA 4 2 0 GTACTATGGT		560 ATCTATAAAG	0 E 9
9 1√		60. (CATPTGCC		_	270 TGATGATION	340	4 10000	480 GCACCATTTA	550 560 SATGARTCAC ATCTATAAAG	620
		50 CGATGACACC	120 AACATTGTT	190 CATTGCGCCC	260 TGATGCTATA	330 AATCTATTGA	400 GCAATATTGT	470 GTTTGTATAC	540 GGTAAACCAC	610 AGAGTACGCC
	and NcoI	40 CGTATGATGG	110 GACATGATTT	180 TTGTAAAAAT	250 ATCAGAATGG	320 TTTTGAAACT	390 AAATCACATC	460 CAAGTGATGT	530 ATTTTTTAA	610 TGGCAGTGGC AGAGTALGL
	Between Sall	30 GCTCGCCTGC	100 TTTAACATGT	170 AGTAACGCAT	240 TGATTATTGT	310 ATTTGATATA	380 CTTTTTGTAA	450 CAGATTCATT	520 AGCATGTATC	590 GGCACATTTA
	Sequence	20 GGGCAGGTGT	90 TGTGATATGA	160 TAACGCATTT	230 TGATTGTATC	300 TCACTCTATG	370 TAATGGTAGG	440 TCCCAATCAC	510 TGCCTATGTC	
FIG.6A	Nuclectide	10 CCATGGATAT	80 CGATTTGACA	150 CATAATTTAG	220 TAGAATATTA	290 TTTGGGTTAA	360 TAATTTAGCA	430 TGAATGACGA	500 TTCAATCAAA	570 580 TCATCTTTAA CAAAGCCACA
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U.S. Pat	tent	Ser	o. 15, 199	98	Sheet 7	of 17		5,808,024		
700 CCGCGCTCGC	•	840 ATTGCTATTG	910 TCAATGGAAG	980 TGTAAAGGCT	1050 AATCCTAAAC	1120 GAAGCTCAAA	1190 AGCCARGICA	1260 TCCTTGGCAG		
690	760	830	900	970	1040	1110	1180	1250		
GCCCGTATTG	AAGATACCAA	TGATCGAGCC	AATAAAACTG	TCGGTGGTGA	TCAGCATGGT	AAAGAAATAC	CTGCAGTGGG	AAGTGCCTAT		
680	750	820	890	960	1030	1100	1170	1240		
TCTGAGCTTT	GCTCAAAAA	AGGCGGACGG	CGGTAGTAGT	TCCATCGCCA	ATTTGCTTGA	TGCAGTATTA	CACGCCAGTA	CAACAGCTAA AAGTGCCTAT		
670	740	810	880	950	1020	1090	1160	1230		
GTGTATGCAC	CAGTGCTTAT	GGCACTGCCA	CCATCGCCAT	GGGTCAAGAG	GATGACTTAC	TTAACGGCCA	CGCAAGCGGA	GGTACACGGG		
660	720 730	800	870	940	1010	1080	1150	1220	٠.	
CAAGTTGGCA	ATCGGTGCAA CGCTCAGTGG	AAGACGCTCA	GGCGGTCAAG	CCGATGCTAC	CATCGGTAGT	AACGATCTTA	GACGCACAAC	CAACGCCTTT		
FIG.6B 640 650 Gegracere rectacades caaetreeca		790 AAAACCAGCC	860 TAACGCACAG	930 AAGATAGGTA	1000 CCTCGATTGC	1070 TACTCTGATT AACGATCTTA	1140 GTAAAATATA		•	
FIG.6B 6408 cfcchaccrd	710 TGTCCTCGTG	780 ATTGGTGAAC	850 GTGAAAATGC	920 CAGTTTGGAT	990 AGTGGTGATG	1060 ATCCGAAAGG	1130 GGATAATGAT	1200 TATGCAÇAGG GTCATTTTTC		

. U. S	S. Pat	ent	Sep	. 15, 1998	3	Sheet 8 (of 17		5,808,0	24
	1330 CTAGCTCGTT	1400 TCAAGGTTCT	1470 GACCCCAAGT	1540 GTAAAATCAT	1610 GGTGAAGTGG	1680 TTGGATAATA	1750 TAAAAGAGGC	1820 TACAACTACA	1890 AGTGATAGTT	
9 1;	1320 GATGCAACAT	1390 TTGCCCTAGG	1460 CCAGGCACTA	1530 TCTATCAAAC	1600 TAGAAGCGGT	1670 AAAAATAGGT	1740 ATCGGTGTGG	1810 CTGAGGTGAA	1880 TGAATTATTG	
	1310 TATTGGTTCT	1380 CAGGGCAGTA	1450 CACCAAATAC	1520 TGGTAGTAAC	1590 GTGGCACAGC	1660 GTACTGACGT	1730 CGATAATAAT	1800 AACAATCTTA	1870 GTACTACAGC	
	1300 CTACAATCGC	1370 TGCTCAGCTA	1440 CCGGCCTATA	1510 CACTTTCCAT	1580 TGCGGTCAAT	1650 GATGATAACA	1720 ACGCATTAAC	1790 TAAAACTTTA	1860 AGTAGTAGTA	
\$.	1290 GAGGGCCAAT	1360 CAGGTACTCG	1430 TAATTCTAGA	1500 AAGGCGGGTC	1570 ATAAAACCGA	1640 TTTTCAGGGT	171.0 GCAGAGACCA	1780 TTAAACTTGC	1850 TAAGGTAGGT	
	1280 CGCCACAGCC	1350 GCCCTTGGTG	1420 AGAGTGATAA	1490 CAATAATACG	1560 GCAGGTGTTA	1630 GTAGAATTAC	1700 TAAAGGTGGT	1770 GGTCTGAAAG	1840 CAACCACAGT	
FIG.6C	1270 TEGENCTIGO	1340 GGGAGCGATA	1410 GTTGTCACTC	1480 TTCAAGCCAC	1550 CAATGTCGGT	1620 GCTAAGGAGC	1690 CTTTAACTAT	1760 TGATAATAGT	1830 TTAAATGCCA	

U.S. I	Pate	nt	Sep.	15, 1998	S	heet 9 of	`17	5,808,024		
,	ATGGGGTGAA	2030 AATTGGCTTT	2100 GTGGGTAGTG	2170 AAGGTAGCAG	2240 CGCTGGCATC	2310 TACAACATTG	2380 GTGGTACGAA	2450 TGACAGTGCT	2520 AAAGATACGA	
*,470 Q C	TATGGCGTTA	2020 CCAGAGATAA	2090 ACAACTTAAA	2160 AATCTTGCCA	2230 TAAACGCAGG	2300 CGCCCCAACT	2370 GTTAAGGGTA	2440 ATCGAACGGC	2510 CACCGTGGCT	
0 / 0 /	CAAAACCGTC	2010 ACTCGTATTA	2080 TGGATAAAAA	2150 AAAGATCAGT	2220 AAGCCTACTT	2290 GCAATGTTAC	2360 TAAATTTAGT	2430 AATGAAGTCA	2500 CCAACGCTAT	
1930	AAAGCACAAG	2000 AATCGGCACT	2070 GCACCATATT	2140 CAGGTAATAA	2210 CAAAGCCGCC	2280 GCTAAGAGTG	2350 GCACTAGTGA	2420 AAGCTATCTA	2490 GATGATGACG	
1920	ACAGGCAGTC	1990 CAACAGCAGC	2060 TGAAAAACAA	2130 GGCATTGATG	2200 TCGAACAGCT	2270 ATCAGTTGAT	2340 AACAGTGATG	2410 AACATTTGGC	2480 AGAAGAAGAC	
1910	CCAGCCCAAT	1980 AATGCAGAAA	2050 GTGATGTTGA	2120 CATAGACAAT	2190 GCGGTTACCA	2260 CTACTGAAAT	2330 CACCGAGCTT	2400 GTTACCGCCG	2470 TTACCGTTAA	
FIG.6D	TAACCTTTAC	1970 GTTTACTAAT	2040 GCTCGAGATG	2110 TTGCAATTAC	2180 TGCTAACGAT	2250 AGTGTCACAC	2320 GCGTGAAAAC	2390 CAATAGCTTA	2460 CTACAAAGCT	

U.S. Pate	nt	Sep.	15, 1998		Sheet 10	of 17	4	5,808,0	1
2590	2660	2730	2800	2870	2940	3010	3080	3150	
CTACCAAAAA	CCTAAACAAC	TTTACTAATG	TTGGCTTTGC	TGGCAATGTT	CTGCCTAGCA	CCAACGCTGC	CTTTGTCTCC	ACCGCTAACA	
2580	2650	2720	2790	2860	2930	3000	3070	3140	
CTAACGGTTG	GCAAAAGCAC	TGGCATTAAA	AGAGATAAAA	AGCTACAAGT	GTCCCCAACA	AAAGACAAAT	ACCCCATTGA	AACCCATGAT	
2570	2640	2710	2780	2850	2920	2990	3060	3130	
TAAAAACGGT	CTGACCATTG	TCGGTGCTAA	TCGCATTACC	GATCAAGACA	TCACAGGGCT	AATCCAAGAC	AATAATAACA	CCGCCACAGT	
2560	2630	2700	2770	2840	2910	2980	3050	3120	
AACTCAAAGG	AGATAGCGGT	CAAATĆCAAG	CAAATACCGC	ACCTTATCTT	GGTAAAGCCA	TGGGCAATAC	TAACCTAAAA	AATGCCACCA	
2550	2620	2690	2760	2830	2900	2970	3040	3110	
AGCATCTTAA	GGCTTAGCCA	TACCAACGAA	ACTGGCATTG	ATACAAACAA	TAACGCAGGT	AACATAGAAC	ATACAGGCTT	TGCCAATGGC	
2540	2610	2680	2750	2820	2890	2960	3030	3100	
CGGCGCAGTC	GTTACCTTTG	CTGTTAAAGA	TAATCCAGGT	GGTGCAGTTG	ACACTGGCAT	AAGTAGCCGC	GATATATTAA	TTGTTGACTT	
FIG.6E 2530 CAAAAAATGC	2600 AGATGGTACG	2670 GATGGCTTGA	2740 TGAATGGTAG	2810 TGGTTCTGAT	2880 AAGATTACCA	2950 TTGCCGATCA	3020 CAGCATTAAT	3090 ACTTATGACA	

U.	S. Pat	ent	Sep	. 15, 1998	3	Sheet 11	of 17		5,808,024			
	3220 CTGATGACAA	3290 AACTAACTTT	3360 AACACCCTAG	3430 AAAAGGTAGA	3500 TCAAGTCAAC	3570 ACCTTTGGCA	3640 TTAAAAACCC	3710 TAATGGTGTT	3780 ACTAATGGCT			
	3210 CTAACAGGCA	3280 GTAATACAGC	3350 CGAAAATCTA	3420 TTTACCGTTA	3490 ACGCAAATAA	3560 TGGTACGGTT	3630 GGCTTGTCTA	3700 AGGTTAATAA	3770 CTTTACTGGG			
	3200 AACCATTCAT	3270 AGTGCTAATG	3340 AAGACATCGC	3410 CCTACAAACC	3480 GGTCAAAAGA	3550 CCGACAAAAA	3620 AAACGACGGT	3690 AAGTTTGCCA	3760 ATGAAATTGG			
	3190 TGGATGATAC	3260 GAACAAAACA	3330 GTTAACGCCA	3400 CAGACACCGC	3470 CATCACCGTG	3540 AATATTAAAA	3610 AAAGCACCCT	3680 TGATGGCGTG	3750 ATTACCAGAG			
	3180 GATGTGAATG	3250 CCACCAAACT	3320 AGATGCCCTT	3390 AAAGGCACAG	3460 ACGCCAACGC	3530 AAACGGTCTT	3600 AAAGCCGGCA	3670 AAGTCGGTGC	3740 CACAACTCGC			
	3170 AGTGGTATAT	3240 GGCGTCAAAA	3310 CTAGTGATGA	3380 TCACACCACC	3450 AATGCTGATG ACGCC	3520 TCAAAGGTGA	3590 AAGCGGTCTT	3660 GAACAAATCC AAGTC	3730 GCATTGATGG			
FIG.6F	3160 AAACCAGTAA	3230 TAAAAAACTT	3300 AATGTTAACT	3370 CCAAGGAAAT	3440 TGAAAATAAT	3510 ACCCTAACAC	3580 TTAACACCAC	3650 CACTGGTAGC	3720 GTAGGTGCTG			

U.S. Pate	ent	Sep.	15, 1998	Si	heet 12 o	5,808,024			
3850	3920	3990	4060	4130	4200	4270	4340	4410	
TTACCAACAT	TTTAAAAACC	TCAGTAGCAG	CCTCTGATGT	GGGCATTGAC	GTCATTGACA	ATAAAGGTAG	CATTGTTGAT	TATGACACCG	
3840	3910	3980	4050	4120	4190	4260	4330	4400	
GGTAAAAAGA	AGATTTATGA	ACACGAATTC	ACCTCAAAGA	TGGTGCGTGT	CAAAGGCATT	GTTACCAATG	GTGCCGCCAG	TGTCTCCACT	
3830	3900	3970	4040	4110	4180	4250	4320	4390	
TAACGCAGGT	ACAGGCGGCA	AAAACTCATT	CAGTTATGAC	AATAAAGGTG	ATAATAATGG	TCTAGCTAAT	GACAAAACCC	CGGTTGACTT	
3820	3890	3960	4030	4100	4170	4240	4310	4380	
AAGACGGCAT	TGATGCTGTG	AAAACAGCAC	ACCCTTACTC	CACCAAGGTA	ACCGTGGGTA	TÁAGCAACAC	CAAAGACGAA	AATGGTGAAG	
3810	3880	3950	4020	4090	4160	4230	4300	4370	
CACCTAAGCA	AAAACAGCCA	CAGTACTGCC	ACGGTTAGTA	ACGGCATTAC	GCCTAAGCTG	ATCACAGGAC	GCAATATAAT	CTTGCAAGGC	
3800	3870	3940	4010	4080	4150 4160	4220	4290	4360	
AAGCAAACCC	GAGATTGCCC	ACAAAATCAG	TAATAACTTT	GCAGGTGAAA	GCTTAACCAC GCCTAAGCTG	TCAAAATACC	ACAGAACAGG	CAGGCTTTAA	
FIG.6G 3790 CACTTGATAA	3860 TCAATCAGGT	3930 GAACTTGAAA	4000 ATGAACAAGG	4070 CATCACCTTT	4140 CAAACCAAAG	4210 GCCAAAATGG	4280 CGTACGCACC	4350 GTGCTAAGCG	

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. · · ·	4480 CCAGTAAAGT	4550 AAAAACCACC	4620 GATGCGCTTG	4690 AAGGGGCAAG	4760 TACCGATAAC	4830 AAACTGGTCG	4900 AAGAACAAGT	4970 AAAAGCCGCT	5040 ACACCGCTGA			
* The	4470 ACAAGCAAAA	4540 AACTTGGCGT	4610 AGCTACTGGC	4680 CAAACTGCCA	4750 TCTATGACAG	4820 TGCCAAAGAC	4890 GTCATTAACA	4960 AAGGACTTGA	5030 CGTTGCCCAA			
	4460 CTATGATGAC	4530 AAAGATAAAA	4600 TAAGCAATCA	4670 TGGCGACATC	4740 AATAAGGTCA	4810 CCAAAGAAGT	4880 TGTCAAATCA	4950 GCCTTTGTTA	5020 ATTTAAATGC			
	4450 CTAAGGTGAC	4520 CATTGAAGTT	4590 AAATTTGCCC	4660 ACACCTTATC	4730 TGCTGATGGC	4800 GTTGATAAAA	4870 CTCAAATGAA	4940 TGAAGACAAC	5010 ACTGTGGGTG			
	4440 GCCACCACCG	4510 ATGATACAAC	4580 AGGTGCTAAT	4650 GCTCATCTAA	4720 GCTATGTGGA	4790 TGATGGCACA	4860 GGCACATTGG	4930 AAGGCATCAA	5000 CGCCGCAGTA			
	4430 CGATGGCAAT	4500 GTCAATGTGG	4570 GTACTGGCAC	4640 TGATATCGTT	4710 AACTCAGCAG	4780 AAGCCAAAAA	4850 AACCCCAGAT	4920 AATAAAAAGC	4990 AAACCAAAAA			
FIG.6H	4420 TCAACTTTGC	4490 GGTCTATGAT	4560 ACATTGACCA	4630 TCAAGGCCAG	4700 CCAAGCGAAC	4770 AAGTACTATC	4840 CCCAAGCCCA	4910 AAATGATGCC	4980 TCTGATAACA			

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5110	5180	5250	5320	5390	5460	5530	5600	5670	5740
GTGGGCAAAC	TGTCAAACTT	GGCGTGTCTT	ACCTGGGTGG	GTTAAACGAA	AACATTGCCG	CGGTACTTGG	TAAAGACGGC	GCCCTGCTCG	ACAGAATAAA
5100	5170	5240	5310	5380	5450	5520	5590	5660	5720 5730 5740 CAACCCCGCA GAAGCCATTG ACAGAATAAA
ACCATCAAAG	ATGGCTTCAC	TGATGACAAA	AATGGGCTGG	ATGTACAACA	CAATCAGGTA	AAAGCAGGCA	TGGGCGTGGA	CAGCAAAAAA	
5090	5160	5230	5300	5370	5440	5510	5580	5650	5720
CGAGACTTTG	GCAGGTACTG	GCACCAAAAT	GCTAAGTGCC	GACGCTGCCA	ACGCTGACGG	CACTGTCATC	GGTATACAAG	AAAAAGATGG	CAACCCGGCA
5080	5150	5220	5290	5360	5430	5500	5570	5640	5710
AAAAACTGGG	CGGȚGTGGTA	AATGCAGGTG	ACACCCCTGT	AAAAGATACC	GGTAATGATA	CATCTAACCG	TGCCACTGGT	GTCAAAACCC	ATTTGACCAA
5070	5140	5210	5280	5350	5420	5490	5560	5630	5700
ACAACGGCTA	ATAATAACAT	TAACAGCGTT	GCCAAAGCAA	GCAAAGGCAC	TGGTAATGCT	TCAGGTTCAT	CCGAAAAACT	CAATGTTTGG	CAGACCAACT
5050 5060	5130	5200	5270	5340	5410	5480	5550	5620	5690
CCTTTGCAGG GGATACAGGC	AAGCTAACCG	TAACCAATCT	AAGCGGTCAA	AGTAATGTGG	TGTTGGGTCT	AGACCCAAAT	AATAACGATA	GCGATTTAAG	CGCCGCAĢGT
5050	5120	5190	5260	5330	5400	5470 5480	5540	5610	5680
CCTTTGCAGG	AGACACCAAT	GCCAAAGACC	TTGTAGACTC	CAAGGTCATC	GTACGCAACT	ACATCAAAAA AGACCCAAAT	CGGTAAAGGT	AACGCTAACG	CCACTTATAA

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5880	5950	6020	6090	6160	6230	6300	6370	6440
GGTGAAGCCG	CACAAGCCAC	CATCGGCGAC	GCCACTCAAA	GTTCAAACTC	TACAACCACC	TCCGTGGGTG	CCGATGCGGT	
5870	5940	6010	6080	6150	6220	6290	6360	6420 6430 6440
CAAGGCAGAT	GGTGATAACG	ACTCTGGTGC	GTTTACCGAT	GTTGCCTTAG	GCACAGCAGG	TGGTGCGGTC	GCCACCAGCA	AACGCAACCA ATGAGCTTTGA CCATCGTATC
5860	5930	6000	6070	6140	6210	6280	6350	6420
GTTTCCAGGC	CATCGCCATC	GCAGGTAAGC	ATAACAACCA	AAGTAACTCG	AAATCTGACG	AAACGGCGGT	TGAGGTCAGT	AACGCAACCA
5850	5920	5990	6060	6130	6200	6270	6340	6410
GTGGCGATAG	GCAACCAATC	CAATGTGGTA	AGTGTGGGTA	CCGTGACCGA	ACAAGCCAAA	TTTGCTGGAC	TGGCAGCAGG	AAGCATTGCC
5840	5910	5980	6050	6120	6190	6260	6330	6400
CAAGCACTCA	ACCCAAGCAG	TCGGTACAGG	TAACAGTTAC	AATAACATCA	ACGCAGGCAC	GGTTAAAGGC	ATCCAAAATG	AAGCCACCCA
5830	5900	5970	6040	6110	6180	6250	6320	6390
GTGCCTCAGG	AGGCAGACAA	TCCATCGCCA	TTAAGGCTGA	TGGTGTGGGC	GCAGGCACAC	CAACCGGTAC	TGAACGCCGT	CAGTTGTACA
5820	5890	5960	6030	6100	6170	6240	6310	6380
ATTGACTCAA	CCGTTGCCAT	GGGCGATCAA	CCAAGCACTG	CCGATGTCTT	TGCCATCAGT	ACAGCAGGTG	CCTCAGGTGC	CAATGGTAGC
	5830 5840 5850 5860 5870 GTGCCTCAGG CAAGCACTCA GTGGCGATAG GTTTCCAGGC CAAGGCAGAT	5830 5840 5850 5860 5870 GTGCCTCAGG CAAGCACTCA GTGGCGATAG GTTTCCAGGC CAAGGCAGAT 5900 5910 5920 5930 5940 AGGCAGACAA ACCCAAGCAG GCAACCAATC CATCGCCATC GGTGATAACG	5830 5840 5850 5860 5870 GTGCCTCAGG CAAGCACTCA GTGGCGATAG GTTTCCAGGC CAAGGCAGAT 5900 5910 5920 5940 AGGCAGACAA ACCCAAGCAG GCAACCAATC CATCGCCATC GGTGATAACG 5970 5980 6000 6010 6010 TCCATCGCCA TCGGTACAGG CAATGTGGTA ACTCTGGTGC	5830 5840 5850 5860 5870 GTGCCTCAGG CAAGCACTCA GTGGCGATAG GTTTCCAGGC CAAGGCAGAT 5900 5910 5920 5930 5940 AGGCAGACAA ACCCAAGCAG GCAACCAATC CATCGCCATC GGTGATAACG TCCATCGCCA TCGTACAGG CAATGTGGTA 6010 6010 6010 TTAAGGCTGA TAACAGTTAC AGTGTGGGTA ATAACAACCA GTTTACCGAT 6080	5830 5840 5850 5860 5870 GTGCCTCAGG CAAGCACTCA GTGGCGATAG GTTTCCAGGC CAAGGCAGAT AGGCAGACAA ACCCAAGCAG GCAACCAATC CATCGCCATC GGTGATAACG 5970 5980 6000 6010 6010 TCCATCGCCA TCGGTACAGG CAATGTGGTA GCAGGTAAGC 6080 TTAAGGCTGA TAACAGTTAC AGTGTGGGTA ATAACAACCA GTTTACCGAT 6110 6120 6140 6150 6150 7GGTGACCGA AATAACATCA CCGTGACCGA AAGTAACTCG GTTGCCTTAG	5830 5840 5850 5870 GTGCCTCAGG CAAGCACTCA GTGGCGATAG GTTTCCAGGC CAAGCCAGAT 5900 5910 5920 5930 5940 FCCATCGCCA TCGATACAGG CAATGTGGTA GGTGATAACG 6010 6010 TTAAGGCTGA TAACAGTTAC AGTGTGGTA ATAACAACC GTTTACCGAT 6080 TTAAGGCTGA TAACAGTTAC AGTGTGGGTA ATAACAACC GTTTACCGAT 6150 TGGTGTGGCA AATAACATCG CCGTGACCCGA AAATCTGACC GTTGCCTTAG 6220 GCAGGCACAC ACCAGGCACA ACAAGCCAAA AAATCTGACG GCACAGCAGG ACAAGCCAAA	5840 5850 5870 CAAGCACTCA GTGGCGATAG GTTTCCAGGC CAAGGCAGAT 5910 5920 5930 5940 ACCCAAGCAG CATCGCCATC GGTGATAACG 5980 6000 6010 TCGGTACAGG CAATGTGGTA ACTCTGGTGC 6050 6060 6070 6080 TAACAGTTAC AGTGTGGGTA ATAACAACC GTTTACCGAT 6120 6130 6150 6150 AATAACATCA ACAAGCCCAAA AAATCTGACG GCACAGCAGG ACGCAGGCAC ACAAGCCAAA AAATCTGACG GCACAGCAGG ACGAGGCAC ACAAGCCGAAA AAATCTGACG GCACAGCCAGG	5840 5850 5870 CAAGCACTCA GTGGCGATAG GTTTCCAGGC CAAGCCAGAT 5910 5920 5930 5940 ACCCAAGCAG CATCGCCATC GGTGATAACG 5980 6000 6010 TCGGTACAGG CAATGTGGTA ATAACAACG 6050 6060 6070 TAACAGTTAC ATAACAACCA GTTTACCGAT 6120 6210 6150 AATAACATCA ACAAGCCAAA AAATCTGACG 6190 6200 6220 ACGAGGCAC ATTGCTGGAC GTTGCTGGTC 6280 GCACACGCGGT TGGTGCGGTC 6280 GCACACAGCGGT GCACACAGCGGT 6280 GCACACAGCGGT GCACACAGCGGT 6280 GCACACAGCGGT GCACACAGCGGT 6280 GCACACAGCGGT GCACACAGCGGT 6330 GCACACACAGCGT GCACCACCAGCGT

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6510 CCACAAGCCT	6580 TGGCAGTGGG	6650 CCAAGGCCAT	6720 AAAAATCAAT	6790 TATCACTTAA	6860 AAACTTATTG	6930 GACCGATTTA		
6500 GGCGTCCATG	6570 CAAGGTGCGG	6640 CAGCCGATAC	6710 GATTTTACTT	6780 TGATGTTTTT	6850 GATCATAGGT	6920 ACCAAAAAAT		
6490 CGATGGCGAT	6560 CCACAACGGT	6630 ATCAATGGTT	6700 TAAATCGCAA	6770 TTACTGATGC	6830 6840 ACCATGACCA AATCGCCATT	6910 TGTGCCATTG	GAC	
6480 ATTTCATCAG	6550 GTATTGCCAC	6620 GGTATTTAAA	6690 TTTTAAGCCA	6760 ATCAGTCATA	6830 ACCATGACCA	6900 TGGTTAAAAT	6970 CCTGCAGGTC	
6470 CAATGCAGGG	6540 GTTACCGGGG	6610 ATGGTCAATG	6680 AGGTTTCAC	6750 CAGCATCAGC	6820 ATTCTCTTTC	6890 TTGTTAGATA	6960 GATCCGTTGA	
6460 AAAATAAGGC	6530 CAGATCCATG	6600 CTGTCGGATA	6670 CAGTTGGTGC	6740 TTGTATAAAA	6810 CGCTCAAGTG	6880 ATCAATGTAG	6950 TTCTGATTAT	
FIG.6K 6450 caccaaaacg	6520 ACATTCCTGG	6590 ACTGTCGAAG	6660 GTAGGGGCGG	6730 CTCACCATAG	6800 ACCATITITAC	6870 AGTAAATTTT	6940 TCCCGAAAAT	

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₹C.	AAA	GAT	
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CAT	TGG	GAT	
CGC	ATA TGG	TCT	
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CCA TGA CCA AAT	AGT	6939 TTT ATC CCG AAA ATT	
CCA	TGT	ATC	
TCA	CAA	TTT	
CTT	TAT	CGA	
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	CAC	His
	ACC	Thr
	GCC	Ala
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	GAT	Asp Thr		
	ggg	Ser Ala		
	TCA	Ser		
	GGT	Gly		
	AAT	Asn		
	ATC	Lys Ile		
	AAA	Lys		
6615	TTT	Phe		
w	GTA	Val		
	TGG	Trp		
	CAA	Glu Trp		
	GGT	G1y		
	AAT	Asn		
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GGC G1y	
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CAT AGT TGT ATA AAA CAG CAT AAG ATT TTA CTT AAA AAT CAA TCT CAC

TCA CTT AAA CCA TGA TGC TGA TGT TTT CAG TCA TAT TAC

FIG.6 con't.

CGT GGT Ser TCA Val 6291 TCC Ser Val gcg GGT Gly GTT Val GCG Ala ACG CAA Gln GGA Gly

GTC AAT Val Asn Asp GAT ACC Thr AGC Ser ACC gaa Ala Ser AGT 6345 GAG GTC Glu Val GGT Gly GCA Ala GTG Asn AAT CAP ATC

33/47 CTT CTT Leu Asn ACC Ala GCA Asn AAC GCC ATT Ile AGC Ser 6399 CAA Gln 5 ACC GCC AAA Lys TAC TTG Leu AGC Ser GGT

GCG Ala Asn AAT AAG Lys 6453 GAA AAT Glu Asn AAC Asn Cara Gln CAC ATC Ile CGT CAT His GAC SHEET

TCC AGA CCT ATT TAC 6507 GCC Ala Gln CAA CCA ATG TCC Ala GCG

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	32	147	
6102 GGT G1Y	6156 TCA AAC Ser Asn	210 33C 317	6264 TTT GCT Phe Ala
6102 GTC TTT GGT Val Phe Gly	TCA Ser	GAC GAC ASP	TTT Phe
GTC Val	GGT Gly	TCT	GGC
gat Asp	rta Leu	AAA Lys	AAA GGC : Lys Gly 1
CAA ACC GAT Gln Thr Asp	GCC 7	GGC ACA CAA GCC AAA AAA TCT Gly Thr Gln Ala Lys Lys Ser	
CAA Gln	itt al	GCC	GCA ACC GGT ACG GTT Ala Thr Gly Thr Val
	TCG Ser	CAA	GGT
GAT GCC ACT Asp Ala Thr	AAC	ACA	ACC
gat Asp	AGT AAC Ser Asn	GGC	GCA
6075 ACC Thr	6129 ACC GAA I Thr Glu	6183 CAC GCA (His Ala (6237 CC ACA GCA GGT Thr Ala Gly
rrr Phe	ACC	CAC His	GCA Ala
AAC CAG 'Asn Gln 1	GTG	GGC ACA Gly Thr	ACA
AAC	ACC	GGC Gly	A H
AAC	ATC	GCA Ala	ACC
AAT	AAC Asn	AGT	ACA ACC Thr Thr
GGT	GGC AAT AAC Gly Asn Asn	ATC	GGT
GTG Val	GGC	GCC	GCA C
AGT	GTG Val	TCT	ACA

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	His Ser	S ATA GGC 1	Ile Gly	III CAA GCC	TE Gln Ala			Lys
	Val	AGA	Arg	ACG	Thr		TCT	
	Ala	CAA	Gln				GGT	
ATA	Ile	ACC	Thr	GAT	Gly Asp	. (g G G	Ala
GGT	Gly	5913 CAA GCA GGC AAC	Gln	CAA TCC	Gln	1	GCC ATC GGC GAC CCA AGC	Ile
TTC	Phe	GCA	Ala	TCC	Ser	1	C C C C C C C C C C C C C C C C C C C	Gly
CAG	ly Phe Gln Ala	ວອອ	Gly	ATC	Ile	•	GAC	Asp
5859 GCC	Ala			5967 GCC	Ala	6021	A C C C C C	Pro
AAG	Lys	CAA TCC	Gln	ATC	Ile		AGC	Ser
		ICC	Ser	GGT	Gly		ACT	Thr
GAT	Asp	ATC	Ile	ACA	Thr		GTT	Val
GGT	Gly	ညည	Ala	299	Gly		AAG	Val Lys A
GAA	Ala Asp Gly Glu Ala Ala Val	GCC ATC GGT GAT	ile	AAT	Thr Gly Asn Val		GCT	Ala
ည	Ala	GGT	Gly	GTG	Val		GCT GAT AAC	Asp
ည္သ	Ala	GAT	Asp	GTA	. Val		AAC	Asn
GTT	Val	AAC	Asn	GCA .	Ala Gly	Ψ	AGT TAC	Ser
5886 GCC	Ala	5940 GCA	31/4 e [4	5994 ⁷	Glγ	6048	TAC	Tyr

FIG.6 con't.

TTA Leu GAT Asp GGC G1yAAC Asn GCT Ala AAC Asn GGC GAC Asp AAA Lys SS89 GAT ASP GTG GGC GTG Val CAA ATA Ile GGT Gly GGT Gly ACT

30/47 CTC GCC Leu Ala GCC 5670 GAA Glu Leu CTG GCA Ala GCC CCC AAA AAC Asn Asn AAC AAA Lys ACC AGC Ser GGC Gly TIG Leu Asp GAT TAT Tyr 5643 CAA AAA Gln Lys 5697 ACC AAC Thr Asn Lys CAG Gln ACC AAA Lys GGT G1yGCA GTC GCC TGG AAC Asn GTT Val AAT Asn TAT Tyr Ser AGC ACT

5778 AAT GGC Asp GAT AAC GTC Val CAT TTC TIC Phe CGC 5751 ATC Ile GGT CAA GAA Glu AAT ATA Ile AGA Arg GAC ATT

5832 AAG Lys GGC G1yGCC AGT Ser TCA Ser GAC Asp ATT GGC 5805 AAC Asn CGT Arg 999 Gly GAA Gln GTA GTG CCT Pro GAG CAA

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5400	TIG	Leu	5454 ATT	29/4 11	5508	ATC	ile	5562	SCC CCC	Ala
S)	AAC	Asn	AAC	Asn	(u)	GIC	Val	ш	CIT	Leu
	CGC	Arg Asn	GTA	Val	1	ACT	Thr		AAA	Lys
	GTA	Val	CAG	Gln	1	ပ ပ	Arg		GAA	Thr Glu Lys
	GAA GTA	Glu	AAT	Asn		AAC	Asn			
	AAC	Asn	960	Gly	į	TCI	Ser		GAT	Asp
	TTA			Asp		I CA			AAC	
	CAG	Gln		Ala		TCA			AAT	
	CAA	Gln		Asn			$_{ m G1y}$		GGT	
5373	GTA	Val	5427 AAT GAT	Asp	5481	AAT TCA	Ser	5535	GGT AAA	Lys
	HAT GTA	Asn		Asn					GGT	Gly
	ŭ	Ĭ	GGT	Gly	į	S S S S S	Pro		ပ္ပ ပုပ္ပ	
	GCT	o Ala A	GCT	Ala	!	GAC	Asp		CTT	
	GAC	Asi	AAT	Asn Ala (6	AAA	Lys		GTA	Val
	ACC	Thr	GGT	Gly		AAA	Lys Lys		ACG	Thr
	GAT	Asp	CTT	Leu		ATC	Ile		ညည္သ	Gly
	AAA	Lys	T99	Leu Gly	1	GAC	Asp		GCA GCA	Ala
	ACA	Thr			1	U U U	Ala		AAA	Lys
			S	UBST		l	JTE	Sh	łE	ET

FIG.6 con't.

	28	3/47	
SI84 AAA Lys	5238 AAA Lys	5292 CTA Leu	346 GGC
GCC Ala	gac asp	5 GTG Val	AAA 5
CTT	gat Asp	CCT	3. GGC
aaa Lys	ATT Ile	ACC Thr	GTG
GTC AAA CTT GCC AAA Val Lys Leu Ala Lys	aaa Lys	AAC Asn	AAT
GTA GCA GGT ACT GAT GGC TTC ACT Val Ala Gly Thr Asp Gly Phe Thr	5238 GCA GGT GGC ACC AAA ATT GAT GAC AAA Ala Gly Gly Thr Lys Ile Asp Asp Lys	GAC TCA AGC GGT CAA GCC AAA GCA AAC ACC CCT GTG Asp Ser Ser Gly Gln Ala Lys Ala Asn Thr Pro Val	5319 CTG GAC CTG GGT GGC AAG GTC ATC AGT AAT GTG GGC AAA GGC Leu Asp Leu Gly Gly Lys Val Ile Ser Ash Val Gly Gly Lys
TTC	$\frac{GGC}{G1Y}$	AAA Lys	ATC
66C G1y	GGT Gly	GCC	GTC Val
gat Asp	GCA	CAA Gln	AAG
ACT	AAC AGC GTT AAT Asn Ser Val Asn	5265 GGT Gly	319 GGC G1y
GGT	GTT	AGC	s GGT G1y
GCA Ala	AGC	TCA	CTG
	AAC	gac asp	gac Asp
GTG Val	CIT	GTA	CTG
GGT Gly	ACC AAT Thr Asn	TTT Phe	GGG Gly
ATC Ile	ACC Thr	TCT Ser	AAT
AAC	CTA	GTG Val	GCC AAT Ala Asn
AAT	GAC	GGC Gly	AGT

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	TAA	•	GIN VAL ASH ASP Ala ASH LVS
	GTA		Val
	CAA		uT5
	GAA		פוח
	AAA		B/17
4887	AAC		ABI
4,	ATT	11	977
	TCA GTC ATT AAC AAA GAA	17.7	Va1
	TCA	000	790
	AAA	7.00	272
	GIC	17.1	707
	AAT	200	1707
	AA ATG AAT GTC AAA TCI	MET	1 212
	CAA	ברים היים ברים היים ברים	1175

27/47 4968 5022 GTT Val GCT AAA GAA Glu TTA Leu GAT CIL GGA GGT AAA Lys GTG ACT Val Phe GTA GCC GCA Ala Ala 4995 GCA 4941 GCC Ala Asn GAC Asp AAC Glu GAA AAA AAT Asn ACC ATC Ile AAA GGC AAC CAA Gln

CTG Leu AAA Lys AAA GCT ACG ACA GGC Thr ACA GAT Asp 5049 GGG Gly SCA SCA Phe ACC CTG CCG Pro ThrSHEET

Asn

Leu

Asp

Gly

Val

Thr

Val

Asn

Lys

Lys

Asn

Ser

5130 GAT Asp Lys AAG Asn AAT ACC GAC Asp caa gln ල්ලීල Gly 5103 AAA Lys ACC TTG GAG Glu GGC

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				26/	47			
4698	AAC	Ala Asn	4752 ACC	Thr	4806 GAA	. Lys Glu	4860 GCT	Ala
4	GCG	Ala	AGT	Ser Thr	AAA	Lys	4 5	Leu Ala
	CAA	Gln	GAC	Asp	ACC	Thr	6	Thr
	AGC	Ser	TAT	Tyr	AA A	Lys	ָר נ	Gly
	GCA	Thr Ala Lys Gly Ala Ser Gln	ATC	val Ile	GAT	Asp	£	Ala Gln Ala Gln Thr Pro Asp Gly Thr
	999	Gly	GTC	Val			و د د	Pro
	AAA	Lys	AAG	Lys	ACA	Thr	ر د د	Thr
	GCC	Ala	AAT	Gly Asn Lys	ggc	Asp Gly Thr Val	8	Glu
	ACT	Thr	990	Gly	GAT	Asp	<u>ن</u> ن	Ala
4671	CAA	Gly Asp Ile Gln			4779 AAT	Lys Asn	4833	Gln
V	ATC	He	4725 GCT GAT		AAA	Lys	4	Ala
	GAC	Asp	GAT	Asp	CAA GCC	Ala) Le	Val
	GGC	Gly	GTG	Val	CAS	Gln	t) L)	Leu
	TCT	Ser	TAT	Tyr		Tyr	AAA	Asp Lys
	TTA	Leu	960	Ala Gly	TAC	Tyr	GAC	Asp
	ACC	Thr	ปี	Ala	AAG	Lys	AAA	Lys
	AAC	Asn	TCA	Ser	AAC	Asn	טטט	Ala
	CTA	Leu	AAC	Asn	GAT	Asp Asn	LL C	Val

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7044	GIC	Val	4536 GGC	Gly	4590 CTA	Leu	4644 CAT	His
T	GTG	Val	CTT	Ile Glu Val Lys Asp Lys Lys Leu Gly	, 208	Ala	GCT	Ala
	AAA	Lys	AAA	Lys	TLL	Phe	GTT	Val
	AGT	Ser	AAA	Lys	AAA	Lys	ATC	Ile
	ACC	Thr	GAT	Asp	AAT	Asn	GAT	Asp
	AAA	Lys	AAA	Lys	GCT	Gly Thr Gly Ala Asn Lys Phe	AGT	Ser
	AGC	Ser	GTT	Val	GGT	Gly	g G G	Ala
	ACA	Thr	GAA	Glu	ACA	Thr	AAG	LVS
	GAC	Asp	ATT	Ile	GGC	Gly	GIC	Val
4400	GAT	Val Thr Tyr Asp Asp Thr Ser Lys Thr Ser Lys Val Val	4509	Thr	4563 ACT	ser Thr	4617 CTT	Gly Asp Ala Leu Val Lys Ala Ser Asp Ile Val Ala
Ţ	TAT	Tyr	ACA 4	Thr	AGT	Ser	້ ຄວອ	Ala
	ACC	Thr	GAT	Asp Asp	ACC	Leu Thr	GAT	Asp
	GTG	Val	GAT	Asp	TTG	Leu	900	GlV
	AAG	Lys		Val	ACA	Thr	ACT	Thr
	GCT	Thr Ala	AAT	Asn	0	Thr Thr	GCT	Ala
	ACC	Thr	GTC	Val	() ()	Thr	CAA	Asn Gln Ala
	ACC	Thr	GAT	Asp	200	Lys	TAA	Asn
	GCC	Ala Thr	TAT	Tyr	מנהל	Val 1	\bullet \bull	Ser Asn
		C	D ~ -			_		

FIG.6 con't.

	. 24	147		
4212 GGT CAA Gly Gln	4266 AAA GGT Lys Gly	4320 ACC CGT Thr Arg	4374 GGT	4428 GGC AAT Gly Asn
ggr Gly	AAA	ACC	AAT Asn	960 61y
AAT	gat Asp	aaa Lys	GGC	gat Asp
CAA	AAT Asn	gac Asp	CAA	GCC
AGC	ACC	GAA	TTG	TTT Phe
GAC	GTT Val	GAC	AAC	AAC
ATT Ile	AAT Asn	aaa Lys	TTT Phe	GTC Val
GTC Val	GCT	ATC	GGC G1 y	ACC
ATT Ile	CTA	ATA Ile	GCA Ala	gac asp
4185 GGC G1Y	4239 ACT Thr	4293 GGC AAT Gly Asn	4347 CTA AGC Leu Ser	4401 ACT TAT Thr Tyr
AAA Lys	AAC Asn	66C 61Y	CTA	ACT Thr
GGC	AGC	CAG	GTG	TCC
AAT Asn	CTA	GAA Glu	GAT	GTC Val
AAT Asn	gga g1y	ACA Thr	GTT Val	TTT
AAT	ACA	ACC	ATT Ile	gac asp
GGT Gly	ATC	CGC	AGC	GTT Val
GTG Val	ACC	GTA Val	GCC Ala	GCG Ala
ACC Thr	AAT Asn	AGC	GCC	GAA Glu
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	23	147	
CAA		4104 AAA Lys	4158 CTG
GAA Glu	AAG Lys	AAT Asn	AAG Twe
gat Asp	TCA	GTA Val	CCT
CAA AAC TCA TTA CAC GAA TTC TCA GTA GCA GAT GAA CAA Gln Asn Ser Leu His Glu Phe Ser Val Ala Asp Glu Gln	4050 TAC TCC AGT TAT GAC ACC TCA AAG ACC Tyr Ser Ser Tyr Asp Thr Ser Lys Thr	4104 TTT GCA GGT GAA AAC GGC ATT ACC ACC AAG GTA AAT AAA Phe Ala Gly Glu Asn Gly Ile Thr Thr Lys Val Asn Lys	4158 GGC ATT GAC CAA ACC AAA GGC TTA ACC ACG CCT AAG CTG
GTA Val	gac Asp	ACC	ACC
TCA	TAT	ACC	TTA
TTC Phe	AGT	ATT Ile	GGC
gaa glu	TCC	GGC	AAA
CAC His.	TAC Tyr	AAC	ACC
A TTA r Leu	4023 CCT Pro	4077 GAA Glu	4131 CAA
TCA	AAC Asn	ggr Gly	GAC
AAC	4023 GTT AGT AAC CCT Val Ser Asn Pro	GCA	ATT
CAA Gln	GTT Val	TTT Phe	66C
GCA	ACG	ACC Thr	GTG
ACA	TTT	ATC	CGT
AAA Lys	AAC Asn	GTC	GTG
ACT GCC AAA ACA Thr Ala Lys Thr	AAT Asn	gat Asp	GTG
ACT	GGT	TCT Ser	GGT

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	22	147	
TCA Ser			3942 AGT Ser
3 660 61y	ggr Gly	GCT Ala	AGC Ser
AAT Asn	GGT Gly	gat Asp	ATC
ACT	GCA	CAT	AAA Lys
ACC AGA GAT GAA ATT GGC TTT ACT GGG ACT AAT GGC TCA Thr Arg Asp Glu Ile Gly Phe Thr Gly Thr Asn Gly Ser	3834 AAC GCA GGT GGT AAA Asn Ala Gly Gly Lys	3888 CAA TCA GGT GAG ATT GCC CAA AAC AGC CAT GAT GCT GTG Gln Ser Gly Glu Ile Ala Gln Asn Ser His Asp Ala Val	3942 GAA AAC AAA ATC AGC AGT Glu Asn Lys Ile Ser Ser
ACT	GGC ATT A	AAC Asn	gaa glu
TTT Phe	GGC	CAA	3915 GAT TTA AAA ACC GAA CTT ASP Leu Lys Thr Glu Leu
GGC Gly	AAA GAC Lys Asp	GCC	GAA Glu
ATT Ile	AAA Lys	ATT Ile	ACC
GAA Glu	3807 CTA AGC 1 Leu Ser 1	3861 GAG Glu	915 AAA Lys
GAT	CTA Leu	GGT G1y	TTA Leu
aga Arg	CAC	TCA	gat Asp
ACC	CCC	CAA Gln	TAT
ATT	AAA Lys	ATT Ile	ATT Ile
CGC	AGC AAA Ser Lys	AAC Asn	GGC AAG
ACT	AAA Lys	ACC Thr	GGC
ACA	GAT Asp	ATT Ile	GGC G1y
GGC ACA A	CTT Leu	aag Lys	ACA

3726 GAT ASP

GGC

GCT

GGT

GTA

GTT

GGT

AAT Asn

GTT

AAG Lys

GTG, AAG Val Lys

GGC

FIG.6 con't.

				21/4	47				
1210	CIC	Leu	3564	Phe	618 GGT	Gly	3672 GAT	Asp	
~)	ACA	Thr	ACC	Thr	GAC	Asp	GCT	Ala	
	CTA ACA	Leu	GTT	Val	AAC	Asn	GGT	Gly Ala	
	ACC	Thr	ACG		CTA	Leu Asn	GTC	Val	
	AAC	Asn	GGT	Gly		Thr	ATC CAA GTC	Gln	
	GIC	Val	AAT	Asn	AGC	Ser		Ile	
	CAP	Gln	AAA	Lys	AAA	Lys	CAA	glu Gln Ile	
	AAT	Asn Asn Gln Val Asn	GAC	Asp Lys Asn	၁၅၅	Gly			
			ACC	Thr	gua	Ala	AGC	Ser	
3483	GCA	Ala	3537	Lys	3591 AAA	Lys	3645 GGT	Gly	
(*)	AAC	Asn	3 ATT	Ile	CIT	Leu	ACT	Thr	
	AAG	Gln Lys Asn Ala	AAT	Asn	GGT	Ser Gly	CCC	Pro	
	CAA	Gln	CTT	Leu	AGC	Ser	AAC	Asn	
	GGT	Gly	GGT	Gly	ACA	Thr	AAA	Lys	
	GTG	Val	AAC	Asn	ACC	Thr	ATT	Ile	
	ACC	Thr	GAA	Glu	AAC.	Asn	TCL	Ser	
	ATC	Ile	GGT	G1y	A T'T	Ile	TTG	Leu	
	J J	Ala	444	Lys	ָ ני	61y	ָרָיָּטָ טָיָּטָ	G1 Y	
			CHE	CTIT	-1-1-	ECL	1 -	-	

				20)/47	7				
1294	GTT (3348	CIA	Leu	, ··	3402 CTA	Len	3456	GCC AAC	Asn
ניז	AAT Asn	(*)	AAT	Asn		300 GCC 13	Ala	•••	GCC	Ala
	rrr Phe		GAA	Glu		ACC	Thr		GAT GAC	Asp
	AAC Asn		g G G	Ala		GAC	Ala Asp Thr		GAT	Asp Asp
	ACT		ATC	Ile		GCA	Ala		GCT	Ala
	3CA Ala		GAC ATC GCC GAA	Asp		ACA	Thr		AAT	Asn
	ACA	RAA	Lys		66C 617		•	AAT	Asn	
	AAT ACA (ASE The 1	,	gaa	Ala		AAA	Lys		AAT	Asn
	GGT Gly		AAC	Asn			Thr		GAA	Glu
3267			r GTT	Val		3375 ACC	His Thr	2429	GTA GAT	Asp
(*)	GCT	117	CHI	Leu				•	GTA	Val
	AAC AAA ACA AGT GCT AAT Asn Lys Thr Ser Ala Asn		GCC	Ala	,	ATT	Glu Ile		AAG	Lys
	ACA		GAT	Asp		GAA	Gla		AAA	Lys
	AAA Lys		GAA	Asp Glu Asp		AAG	Lys		GTT	Val
	AAC					gg	Ala		ACC	Thr
:	CTG			Ser		CTA	Leu		CAA ACC TIT ACC GIT AAA AAG	Phe
FIG.6 con't.	AAA			Ser		ACC	Thr		ACC	Thr
FIG.	ACC 1		AAC	Asn		AAC	Asn		CAA	Gln
		Sl	JE	357	רוז	UT	E	SHI	EE.	T

ACA Thr	CAT His	ACT	TTA Leu
ACC	GAT Asp	TAT	TTA AAT AC Leu Asn Th
ATT	ACC Thr	GAC Asp	ACA Thr
CAT	GCT	GAC ATT GTT Asp Ile Val	719 ССС -
CTA	AAC Asn	GTT Val	TTT
3213 ACA GGC ACT GAT Thr Gly Thr Asp	AAA Lys	3105 IT GAC TTT GCC AAT G al Asp Phe Ala Asn G	AAC Asn
GGC Gly	3159 ACC AGT AAA GTG Thr Ser Lys Val	TTT	CTA
ACT	AGT	GCC Ala	3051 AAA AAT Lys Asn
3213 GAT Asp	3159 AAA Lys	AAT ASD	051 AAT Asn
GAC Asp	GTG Val	GGC AAT Gly Asn	AAT Asn
AAT Asn	GTA Val	AAT Asn	AAC Asn
AAA AAA Lys Lys	TAT GAT Tyr Asp	GCC ACC Ala Thr	AAC CCC Asn Pro
AAA Lys	GAT Asp	ACC Thr	01d 000
CTT	GTG Val	ACC Thr	ATT 11e
GGC GTC Gly Val	AAT Asn	GCC	GAC Asp
GTC Val	GTG Val	ACA Thr	TTT
3240 AAA ACC Lys Thr	3 GAT Asp	3 GTA Val	3 GTC Val
ACC Thr	3186 GAT Asp	Thr 61	TCC Ser
	•		

GAA

AAC Asn

CGC Arg

AGC

AGT

CAA

GAT

2943 GCC Ala

AGC

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8087	r GAT	Asp
	TCT	Ser
	GGT	G1
	LOD.	Ala
	TLL	Phe
	ggg	Gly
	ATT	Ile
	AAA	Lys
	GAT	Asp
18/7	C AGA	Arg
•	AC	끕
	ATT	
	CGC	Arg
	GCT	Ala
	ACC	Thr
	AAT	Asn
	GCA	
	ATT	

18	3/47
2862 GTT GGC Val Gly	2916 ACA GGG Thr Gly
GTT Val	ACA
CAA	ATC Ile
CTA CAA (Leu Gln	GCC
AAG Lys	AAA G
GAC	367
CAA	C GCA GGT (
gat Asp	GCA
CTT	aa(asi
2835 TAT TYE	2889 GGC ATT Gly Ile
CCI	
AAA Lys	ACT Thr
AAC	AAC
ACA Thr	ACC Thr
gat Asp	ATT Ile
GTT Val	AAG Lys
GCA	GTT
GGT	AAT
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3024 GAT ATA ASP Ile Asn AGC AAC Asn TCC gac Asp CAA AAT GGC Gly

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7777	GAT	Asp
. ``	AAA	Lys
	AAA	Lys
	ACC	Thr
	GCT	Ala
	GTT	Val
	ACG	Thr
	CTA	
	GGT	G1y
7265	A AAC	Asn
•	AAA	Lys
	GGT	Gly
	AAA	Lys
	CIC	Leu
		Lys
	TTA	Ile Leu
	ATC	Ile
	AGC	Ser

17/47 2646 AAA AGC Lys Ser 2754 GGC Gly GTC ACT GGT GGC CCA Pro ATT CAA ACC AAT Asn GAA AGT CTG AAC Asn GGT Thr GGT GAT AAT AGC Asn GTG GAT AAA Lys Asp Val 2727 ACT AAT Thr Asn 2619 | CAA | Gln 2673 ' GTT Val AGC ACT TTTCHI Leu Leu GGG G1y AAA Lys **GGC G1y** ATT TTT Asp GAT ACC GGC Gly Asn Asn AAT GTT Val AAC ACG CTA Leu GCT GGT ACC GGT SUBSTITUTE SHEET

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2376 AGT Ser GGT Gly AAG Lys GTT Val Ser AGT TII Phe AAA Lys 2349 AGT GAT Ser Asp ACT Thr GGC Gly Asp GAT Ser AGT Asn AAC Len CIT Glu GAG

2430 GTC AAT 05 Val Asn 5/ GAT GAT Asp Asp 2484 GAC Asp Glu GAA GAA AAA Lys GTT Val ACC Thr Phe TTT 2457 CAA AGC Gln Ser CTA Leu Ser AGT GAC Asp ACG CGA Arg

GAA Glu

AAT

CTA . Leu

TAT Tyr

AGC Ser

GCA

TIG Leu

2403 GAA CAT Glu His

GCC

ACC Thr

GTT Val

TTA Leu

AGC

AAT

AAC

Ser

Asn

Asn

Ala

Asn

2538 A GTC GCA GGG ggg AAT Asn AAA Lys ACA ACG Asp 2511 GCT AAA GAT Lys Ala GTG Val ACC ATC GCT AAC Asn GAC Asp

2268

Lys

		15/	47
(ATT ATT Ile	2160 2160 AAA	-2214 4 AG CCT
`	GCA	GCC Ala	AAG Lvs
	GTT Val	CTT	GCC
	AGT	AAT	GCC
	$\texttt{GGT}\\ \texttt{Gl}\gamma$	AGT	AAA Lys
	GTG Val	ATC	CTC
	AAA Lys	AAG Lys	CAG Gln
	TTG GAT AAA AAA CAA CTT AAA GTG GGT AGT GTT GCA ATT Leu Asp Lys Lys Gln Leu Lys Val Gly Ser Val Ala Ile	2133 ATT GAT GCA GGT AAT AAA AAG ATC AGT AAT CTT GCC AAA Ile Asp Ala Gly Asn Lys Lys Ile Ser Asn Leu Ala Lys	2214 GAT GCG GTT ACC ATC GAA CAG CTC AAA GCC GCC AAG CCT Asp Ala Val Thr Ile Glu Gln Leu Lys Ala Ala Lys Pro
	CAA	AAT	ATC
9707	AAA	2133 GGT	2187 ACC Thr
	AAA	GCA Ala	GTT
	GAT Asp	gat Asp	GCG
	TTG	ATT	GAT
	TAT		AAC Asn
	CCA	AAT Asn	GCT AAC Ala Asn
<u>::</u>	GCA Ala	gac Asp	AGT
FIG.6 con't.	AAA CAA GCA Lys Gln Ala	ACC ATA GAC AAT GGC Thr Ile Asp Asn Gly	GGT AGC AGT
FIG.	AAA Lys	ACC Thr	GGT.

GAT Asp Val Ser ATA Ile GAA Glu ACT Thr GTC 2241 ATC AGT Ile Ser GGC GCA AAC Asn TTA ACT

ACC AAA Lys GTG GGC AAC Asn TAC 2295 CCA ggg Val AAT Asn Ser AAG Lys

					14/4	7					
	1890 TTA	Leu	1944		Gly	1998	GGC ACT	Thr	2052	GAT GAA	Asp Glu
	\GT	Ser	Ë	IHI	Tyr	•	GGC	Gly		GAT	Asp
	GAT A	Asp	Ç	ر و 1	Val		ATC	Ile		GTT	Val
	AGT	Ser	7	ACC	Thr		GCA	Ala		GAT	Asp
	TTG	Leu	F.	¥	Lys		GCA	Ala		GGT	Gly
	TTA	Leu	7	AGC	Ser		ACA	Thr		GAT	Asp
	GAA	Glu Leu	, (ACA	Thr		ACA	Thr		CGA	Arg
	GCT	Ala	Ç	ソウサ	Gln Ser Thr Ser		GAA	gln		GCT	Ala
	ACA	Thr Ala (GCA	Ala		TII	Phe
•	1863 AGT ACT	Thr	1917	すりよ	Gly ser	1971	AAT	Asn	2025	AAA ATT GGC	G1y
	AGT	Ser	ָר ז	ر 9	Gly		AAT	Asn	•	ATT	Ile
	AGT	Ser	Ç	5	rhr		ACT			AAA	Lys
	AGT	Ser	Ę	HH	Asn		TII	Phe		GAT	Asp
	AGT	Ser	7 7	ر ر	Pro Asn		AAG	Lys		AGA	Arg
	GGT	Gly	ţ	りなり	Gln		GIG	Val		ACC	Thr
n'i	Æ	s Val Gl	Ç	ソンス	Thr		GGG	Asn Gly	٠	ATT	Ile
FIG.6 con't.	AAG	Lys		7 7 7	Phe		AAT	Asn		CGI	Arg
正 の	GTT	Val	7	ACC	Thr			Val		ACT	Thr
			SI	J	BSTI	T	U	TE S	H	EE	T

	rr cag ggr gar e gln glv asr	{	ATT AAA	lle Lys		ra aaa gag gcj	al Lys Glu Ale		CIT	Leu
	ATT ACT TTT CAG GGT		ACT ATT AAA	Leu Thr Ile Lys		GTA AAA GAG	ile Gly Val Val Lys Glu			Asn Leu
	TTT CAG		ACT ATT AA	Thr Ile Ly		GTA AAA GA	Val Lys Gl		AAT CTT	Asn Leu
•	GGT GAT GAI	{	T AAA GGT GGT	e Lys Gly Gly		GAG GCT	Glu Ala		T ACT GAG GTG AAT ACA	
1647	AGT	! } }	GCA GAG	Gly Gly Ala Glu	1755	AGI	Ser	1809	AAT ACA	Asn Thr
	ACT GAC		ACC AAC GCA			GGT CTG	. Gly Leu I		ACT ACA	Thr Thr
	GTA AAA Val Lvs		GCA TTA	Ala Leu		AAA GTT	Lys Val		TTA AAT	Leu Asn
	GTA AAA ATA GGT Val Lvs Ile Glv		ACC GAT	Thr Asp		AAA CTT	Lys Leu		GCC ACA	Ala Thr
1674	TTG	1728	ACC GAT AAT AAT	3/47 use use	1782	GCT AAA	Lys Val Lys Leu Ala Lys	1836	TTA AAT GCC ACA ACC ACA	Thr Thr

0	C T C C C C C C C C C C C C C C C C C C	1458 CTA	Leu	5	8	G		1566	A	타	1620	Ö	Arg
-	GTT GTC Val Val	1458 GCA CTA	Ala	r	ATT	Ile Gly		ਜ :	AAA	Lys	Н	GAG	Glu
	TCT	CAG	Gln		TCC					Asn		AAG GAG CGT	Lys
	GGT Gly	ACC	Thr		CTT	Leu			CTT	Val	•	GCT	Ala
	CAA Gln	AAT	Asn		CCA	Pro			CGI	Gly		TGG	Trp
	CTA GGT Leu Gly	CCA	Thr Pro		GGT	G1y		į	GCA GGT	Ala		AAG	Lys
		ACA	Thr		gag	Ala			155	GIY		GIG	Val
	GCC	TAT	Tyr	•		Lys		į	ין פיניט	Val		GTG	Val
	ATT Ile	၁၁၅	Ala			Thr				Asn		GCG	
1377	GGC AGT	. 1431 AGA CCG	Pro	1485	AAT AAT	Asn Asn		1539	AIC	ITe	1593	CTA GAA	Glu
		AGA	Arg					į	A:I	i Te			Leu
	CAG	TCT	Ser		ACC	Thr				Гуз			Gln
	CTA	AAT	Asn		S S S S S S S S S S S S S S S S S S S					Arg			Ala
	CAG Gln		Asn		CAA				## ·			GTG	Val
	GCT		Asp		TTT			E	AIC	ITE			
on't.	CGT		Ser		AAG	Lys		į	ICL	Ser		GIC	Val
FIG.6 con't.	GGT ACT Gly Thr		Gln		CCC	Pro		(AAC	Asn	•	ggg	Ala
F	GGT		Thr			Asp		1	AGI			GAT	Asp
ű.	GG G1			BST			TE				•	GA	

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GGA GTG Val GCA ACT GCC AGT Ala Ser CAC GGA AGC GCA Ala ACC ACA Thr CGC FIG.6 con't. AGA Arg TAT

ATG

GCC

AAA AGT Lys Ser 124 GCT ACA GCA Ala CGG ACA GGT TTT 1215 . GCC Ala Asn AAC TCC TTT CAT His GGT CAG Gln GCA TAT

TCT GPA Gln GGC Gly GAG GCC ACA GCC 1269 CTT GCC Leu Ala GCA Ala Leu TIG TCC TAT GCC

CTT GCC GCG ATA Ala Ile TTG GGA (Leu Gly TCG Ser 1323 TCT AGC Ser Ser ACA GCA A GAT TCT Ser Gly ATT GCT

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	GAT		ASp	ı
	ACC	E	JUL	
	GGH	5	\T.5	
:	ATA	-	1	

10		
1026 ; CTT	1080 CTT ATT Leu Ile	1134 A AAA Lys
TTG Leu	CTT Leu	GTZ Val
CAT	gat Asp	gat Asp
TTA	AAC	AAT GAT (Asn Asp
gac Asp	ATT Ile	GAT
GGT AGT GAT GAC Gly Ser Asp Asp	CTG ATT Leu Ile	AAG
AGT	ACT	AGC TCA AAG Ser Ser Lys
GGT	AAA GGT ACT Lys Gly Thr	AGC
ATC Ile	aaa Lys	CGA
999 GCC Ala	A CAT CCG His Pro	1107 TTA AAA GAA ATA Leu Lys Glu Ile
ATT	CAT	GAA Glu
TCG Ser	CCT AAA Pro Lys	aaa Lys
GCC	CCT	TTA
GCT AGT GGT GAT GC Ala Ser Gly Asp Al	AAT Asn	GTA Val
GGT Gly	CAT GGT His Gly	GCA Ala
AGT	CAT	GGC CAT
GCT	CAG Gln	GGC Gly
AAG Lys	GAT Asp	AAC Asn
IDCTIT	LITE CO	

			9	147			•
0	702 GTC	756 ACC Thr		810 AAG LVS	864 GGT	GIY	918 GAT
	GCT			810 GCC AAG Ala Lys	960	Gly	TTG
	CIC	AAA Lvs			CAG	Gln Gly	
	909	AAA Lvs		GGC ACT Gly Thr	4 2 5	Ala	AGC
	ರಿದಿ	CAA AAA AAA GAT Gln Lys Lys Asp		TCA GGC ACT Ser Gly Thr	AAC	Asn	GGA
	ATT	TAT GCT Tyr Ala			837 ATT GGT GAA AAT GCT AAC GCA CAG GGC GGT	Ala	GTC AAT GGA AGC AGT Val Asn Glv Ser Ser
	CGT	TAT		AGA	AAT	Asn	GTC
	BCC	GCT	le 1	783 AAC CAG CCA AGA CGC Asn Gln Pro Arg Arg	GAA	G] u	ACT
	TTT	729 GGC AGT GCT Gly Ser Ala	Peptide	CAG Gln	GGT	e Gly Glu Peptide 2	AAA
675	AGC	729 GGC Gly	Pe		837 ATT	Te	891 AAT Asn
	CTG	AGT		CAA G1n	GCT	Ala	AGT
	ACT	CTC Leu		GAA	ATT	116	
	TGC	ACG Thr		GGT GAA Gly Glu	ညည	Ala	GGT GLV
	GTA	GCA Ala		ATT	CGA	Ard	ATC GC Ile Gl
	AGT	GGT G1y		GCA	GAT	ASD	GCC Ala
نږ	ಆ ಡಿದ	ATC Ile		ATC Ile	GGT	GIV	ATC Ile
FIG.6 con't.	CAA GIT GGC AGT GIA IGC ACT	GTG ATC GGT GCA ACG CTC Met Ile Gly Ala Thr Leu	•	AAA CAT ATC GCA ATT GGT GAA CAA Lys His Ile Ala Ile Gly Glu Gln	GCG GAC GGT GAT CGA GCC ATT GCT	ASD GIV ASD ALG	GCC
E G	CAL	CTC		AAA Lys		Ala	CAA GCC ATC GCC ATC GGT AGT Gln Ala Ile Ala Ile Gly Ser
		CIIRC.	7-17				

		8/47	•	
486	ATT	540 CCA CCA	594 CAG	648 GGG
	CTA	G CA	TGG	ACA
	ACC	AAA	TTA	GCT
	TAC GCA CCA TIT ACC	TTT TAA GGT AAA CCA	CAT	TGT
	CCA	TAA	GCA	AGC
	GCA	TTI .	CAG	GGT.
	TAC	TTI	CCA	වවුව
	GTA	GTA TCA TTT	ACA AAG CCA CAG GCA CAT TTA TGG	CGG GGG GGT AGC TGT GCT ACA
	TTT	GTA	ACA	විවිධ
459	GTG	513 CAT	567 TTA	621 AAT CCC ACA GCA
	GAT	CAG	TCT	ACA
	TCA AGT GAT	CTA TGT CAG	AAG TCA	CCC
	TCA	CTA	AAG	AAT
	CAT	TGC	ATA	CCA
	ATT	AAA	TCT	ACG
ني	CAG	ATC	ACA	AGT
COU	AAT CAC CAG ATT CAT	ATT TCA ATC AAA TGC	TGA ATC ACA TCT ATA	CAG AGT ACG CCA
FIG.6 con't.	AAT	ATT	TGA	T GG

- I	47		
/ /	324 42 CTA	378 TAA	432 CCC
	AAT	TTG	GAT
	GAA ACT AAT	GGC TTT	GAC
	GAA	၁၅၅	AAT
	TTT	GTA	TTG
	GAT TTG ATA TAT TTT	ATG	405 CTG TTA CTA CCA TGC TTG AAT GAC GAT
	ATA	TIT AGC ATA ATG	CCA
	TTG	AGC	CTA
	GAT	TTT	TTA
	297 TAT	351 TAA	405 CTG
	CIC	TTA	GTT CTA
	TCA	TGG	GTT
	TAA TCA	ATA	ATT
	GGT	ACC	AAT
	TTG	ATC	ညဗွာ
ن <u>ہ</u>	GAT	TAA	CAT
FIG.6 con't.	cga gtt gat ttg ggt	TTG ACT TAA ATC ACC ATA TGG TTA	AAA TCA CAT CGC AAT ATT
FIG.	CGA	TTG	AAA

216 TAT

TGA ATA GAA

ATG TGT ATC ATA

189 CCC

CGC

TIG

TAA AAA TCA

TIG

CAT

ACG

FIG.6.

54 TTT CCG TAT GAT GGC GAT GAC ACC CCA 27 CTG CGC GCT CCATG GAT ATG GGC AGG TGT

6/47 108 TTT GTA TTA GTG ACA TGA CAT TTA GTA ACG GAT ATG ATT TAA CAT CAT AAT TAC 81 TGT 135 CAT CTG TAC GAT TTG ACA CAT TGC TGI TAC TAA GCC CCA TAT GTT AAC ATT

270 CTA TGA TGA TGC GCT ATA GGT GAT 243 CAG AAT TAT TIG TTA TGT ATC TGA TAT GAT